

Having thus described our invention, what we claim as new, and desire to secure by

Letters Patent is:

1 1. A method for transmitting data in unused portions of licensed communication
2 channels comprising:

3 selecting an unused first portion of a first licensed communication channel,

4 configuring a transmitter to operate in said unused first portion, and

5 transmitting downstream digital data using a transmitting antenna operating on

6 said first portion.

1 2. The method of transmitting data of claim 1 further comprising:

2 selecting an unused second portion of a second licensed communication channel,

3 configuring an upstream downconverter to operate in said unused second portion,

4 and

5 receiving upstream digital data using a receiving antenna operating on said

6 unused second portion.

1 3. The method of transmitting data of claim 2 wherein said first communications
2 channel and said second communications channel are different.

1 4. The method of transmitting data of claim 1 wherein said downstream digital data is
2 selected from a group consisting of telephony signals, high-speed data, digital video
3 signals and DTV signals.

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1 5. The method of transmitting data of claim 1 further comprising enabling a subscriber
2 to select a method of transmitting upstream data from using the unused second
3 portion, using a cable connection, and using a wired connection.

1 6. The method of transmitting data of claim 1 wherein said transmitting antenna
2 comprises an array of transmitting antennae.

1 7. A method for receiving data in unused portions of licensed communication channels
2 comprising:

3 selecting an unused first portion of a first licensed communication channel,
4 configuring an upstream downconverter to operate in said unused first portion,
5 and
6 receiving upstream digital data using a receiving antenna operating on said first
7 portion.

1 8. The method for receiving data of claim 7 further comprising the steps of:
2 selecting an unused second portion of a second licensed communication channel,
3 configuring a transmitter to operate in said unused second portion, and
4 transmitting downstream digital data using a transmitting antenna operating on
5 said unused second portion.

1 9. The method for receiving data of claim 8 wherein said first communications channel
2 and said second communications channel are different.

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1 10. The method for receiving data of claim 7 further comprising enabling a subscriber to
2 select a method of transmitting upstream data from using the unused first portion,
3 using a cable connection, and using a wired connection.

1 11. The method for receiving data of claim 7 wherein said upstream digital data is
2 selected from a group consisting of telephony signals, high-speed data, digital video
3 signals and DTV signals.

1 12. The method for receiving data of claim 7 wherein said receiving antenna comprises
2 an array of receiving antennae.

1 13. The method for receiving data of claim 7 wherein said transmitting antenna comprises
2 an array of transmitting antennae.

1 14. A method for transmitting and receiving data in unused portions of licensed
2 communication channels comprising:

3 selecting an unused first portion of a first licensed communication channel,
4 configuring a transmitter to operate in the said unused first portion,
5 transmitting downstream digital data using a transmitting antenna operating on
6 said first portion,

7 selecting an unused second portion of a second licensed communication channel,
8 configuring an upstream downconverter to operate in the said unused second
9 portion, and

10 receiving upstream digital data using a receiving antenna operating on said
11 unused second portion.

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1 15. The method for transmitting and receiving data of claim 14 wherein said first
2 communications channel and said second communications channel are different.

1 16. The method for receiving and receiving data of claim 14 further comprising enabling
2 a subscriber to select a method of transmitting upstream data from using the unused
3 second portion, using a cable connection, and using a wired connection.

4 17. The method for transmitting and receiving data of claim 14 wherein said downstream
5 ~~digital data and said up stream digital data is selected from a group consisting of~~
6 telephony signals, high-speed data, digital video signals and DTV signals.

1 18. The method for transmitting and receiving data of claim 14 wherein said receiving
2 antenna comprises an array of receiving antennae.

1 19. The method for transmitting and receiving data of claim 14 wherein said transmitting
2 antenna comprises an array of transmitting antennae.